

On page 2, delete lines 11-13.

On page 2, line 19, replace "traditional" with --conventional--.

On page 2, delete lines 28-29.

On page 3, delete lines 4-6; and insert:

SUMMARY OF THE INVENTION

2 The present invention provides for replacing

On page 3, line 7, replace "by" with --with--, and replace "thus reduce" with --reducing--.

On page 3, delete lines 18-21.

On page 5, delete lines 5-6.

On page 5, line 7, delete "as".

On page 5, line 8, replace "presented here can" with --may--, and delete "accordingly".

On page 5, line 9, replace "where" with --in which--.

On page 5, delete lines 23-24.

On page 5, line 25, replace "It is obvious that two" with --Two--, and replace "must" with --should--.

On page 6, delete lines 25-30, and insert:

3 Any desired test strategies may be applied to this method, but it is advantageous to apply the methods according to the present invention.

On page 7, line 27, replace "must" with --may--.

On page 7, line 36, before "relevant", insert --entirely--.

On page 8, delete lines 1-2.

On page 8, line 3, replace "German Patent" with --described in German Patent Application No.--.

On page 8, delete lines 21-22.

On page 9, delete lines 7-9, and insert:  
--Conventional BIST methods usually perform the--.

On page 9, line 11, delete "with".

On page 9, line 12, delete "that".

On page 9, line 23, replace "where" with --in which--.

On page 10, delete lines 14-15.

On page 10, line 24, after "etc.),", insert --or--.

On page 10, delete lines 30-31.

On page 11, line 1, delete "As".

On page 11, line 2, replace "an expedient, it is proposed" with --It is possible--.

On page 11, line 16, replace "One" with --A--.

On page 11, line 17, replace "must be" with --are--.

On page 11, line 21, delete "therefore".

On page 11, line 24, replace "ErrorCHK. To do so, however" with --ErrorCHK--.

On page 11, line 25, replace "must be" with --being--, and replace "However, this" with --The--.

On page 11, delete lines 29-32, and insert:  
--Processors includes a--.

On page 12, line 1, delete "It".

On page 12, delete line 2, and insert:  
--A test may be performed during--.

On page 12, delete lines 10-12, and insert:  
--The present invention provides for replacing defective--.

On page 12, line 13, replace "units in the" with --units, for example,--.

On page 12, line 14, delete "present publication", and replace "can represent" with --may be--.

On page 12, line 15, replace "by" with --with--, and replace "At the same time, the" with --The--.

On page 12, line 16, replace "relates to" with --provides--.

On page 12, line 18, replace "This also" with --The present invention--.

On page 12, line 20, replace "especially important" with --advantageous--.

On page 12, line 22, replace "military" with --military, for example--.

On page 12, delete lines 24-37, and insert:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 illustrates a circuit arrangement according to the present invention.

Figure 2 illustrates elements of the circuit arrangement in a first state according to the present invention.

Figure 3 illustrates elements of the circuit arrangement in a second state according to the present invention.

Figure 4 illustrates elements of the circuit arrangement in a third state according to the present invention.

Figure 5 illustrates elements of the circuit arrangement in a fourth state according to the present invention.

Figure 6 illustrates another circuit arrangement according to the present invention.

Figure 7a illustrates a first test algorithm according to the present invention.

Figure 7b illustrates a second test algorithm according to the present invention.

Figure 8a illustrates a first configuration that tests a chip according to the present invention.

Figure 8b illustrates a second configuration that tests the chip according to the present invention.

Figure 8c illustrates a third configuration that tests the chip according to the present invention.

invention.

Figure 9 illustrates a chip-internal memory with a BIST function according to the present invention.

Figure 10 illustrates a fault-tolerant processor according to the present invention.

Figure 11 shows a flowchart illustrating a self-test process according to the present invention.

Figure 12a shows a flowchart illustrating the generation of new multiplexer states using a counter according to the present invention.

Figure 12b shows a flowchart illustrating the generation of new multiplexer states using a look-up table according to the present invention.

Figure 13 shows a flowchart illustrating a self-test process during an IDLE cycle according to the present invention.

Figure 14 illustrates a representation in which the self-test process is integrated into an application program according to the present invention.

Figure 15 illustrates a look-up table according to the present invention.

Figure 16 illustrates a fault-tolerant bus system according to the present invention.

Figure 17 illustrates saving registers in a chip-internal memory before executing a test algorithm according to the present invention.

Figure 18 illustrates saving registers in an external memory before executing the test algorithm according to the present invention.

Figure 19 illustrates a test register implementation before executing the test algorithm

a4  
cont.

ay  
concl according to the present invention.

On page 13, delete lines 1-21.

On page 13, delete lines 23-24, and insert:

--DETAILED DESCRIPTION--.

On page 13, line 32, replace "are" with --may be--.

On page 13, line 33, delete "an are not absolutely necessary".

On page 13, line 34, replace "composed of" with --carrying--.

On page 14, line 1, replace "are composed of" with --carry--.

On page 14, line 24, replace "according to" with --as described in--.

On page 14, line 25, after "Patent", insert --Application No.--.

On page 16, line 15, delete "it is important for".

On page 16, line 16, replace "to be" with --are--.

On page 17, line 11, replace "according to German Patent" with --as described

a5 in German Patent Application No. --.

On page 17, delete line 13, and insert:

--method according to the present invention. A conventional memory are (0901)--.

On page 17, line 14, delete "to the related art".

On page 17, line 15, replace "is usually" with --may be--.

On page 17, line 19, replace "This" with --It--.

On page 17, line 30, replace "the" with --an--.

On page 17, delete line 31, and insert:  
--correction implemented. The--.

NE On page 18, line 15, replace "described here" with --according to the present invention--.

On page 18, line 19, replace "Thus according" with --According--, and replace "described here" with --according to the present invention--.

On page 19, line 6, replace "proposed" with --provided--.

On page 19, line 8, replace "where" with --in which--.

On page 21, line 1, replace "is performed according to" with --may be performed, for example, as illustrated in--.

On page 21, line 8, delete "here", and replace "ROM" with --ROM, for example--.

On page 22, line 23, replace "proposed" with --provided--.

On page 24, line 8, before "196", insert --No--.

On page 24, line 9, before "196", insert --No--.

On page 24, line 25, replace "must be" with --are--.

On page 26, delete line 1, and insert:  
--What Is Claimed Is:--.